

Southern California Academy of Sciences 2005 Session Schedule

Friday, May 20, 2005

Location: Hilton Business Center, Room 100

Session: Wetland Restoration/Ecology

Chair: Katherine Prickett

- 8:30 TOUR OF THE BALLONA FRESHWATER MARSH PROJECT.
- 1 10:00 SOUTHERN CALIFORNIA WETLAND RECOVERY PROJECT—A REGIONAL APPROACH TO WETLAND RECOVERY. Mary Small, State Coastal Conservancy.
- 2 10:20 BALLONA WETLANDS—COMMUNITY BASED RESTORATION PLANNING. Mary Small, State Coastal Conservancy.
- 10:40–11:00 BREAK
- 11:00–11:30 Welcome, Student Grant Awards.
- 11:30–12:30 Plenary Talk: Dr. Brian Fagan: Fish on Friday: How the Catholic Doctrine of eating Fish on Friday changed History.
- 3 12:30–1:20 LUNCH BREAK
- 1:20 ORMOND BEACH: RESTORATION OF HISTORIC WETLANDS. Peter Brand. State Coastal Conservancy.
- 4 1:40 THE MALIBU LAGOON ENHANCEMENT PROJECT. C.S. Shuman. Heal the Bay, 3220 Nebraska Ave., Santa Monica, CA, 90404.
- 5 2:00 ECOSYSTEM RESTORATION AT TIJUANA ESTUARY, CALIFORNIA. Chris Nordby. Tierra Environmental Services, 9915 Businesspark Avenue, Suite C, San Diego, CA 92131.
- 6 2:20 ON A RESTORING WETLANDS GRASSROOTS LEVEL—NON-PROFITS AND WETLAND RESTORATION. D. Gibson. San Elijo Lagoon Conservancy Executive Director/Principal Scientist, Encinitas, CA 92023.
- 7 2:40 THE JOURNEY FROM WETLANDS TO OIL FIELD AND BACK. Jim Trout. State Lands Commission.
- 3:00–3:20 BREAK
- 8 3:20 ENGINEERING OF THE BOLSA CHICA WETLANDS RESTORATION PROJECT. Chris Webb, Michael McCarthy, Moffatt & Nichol; Jack Fancher, U.S. Fish and Wildlife Service; and Keith Merkel, Merkel & Associates.
- 9 3:40 USING SPATIALLY-EXPLICIT MODELS TO PREDICT EELGRASS DISTRIBUTION FOR RESOURCE MANAGEMENT AND RESTORATION. Robert Mooney. Merkel and Associates Inc.
- 10 4:00 EVALUATING THE SUCCESS OF WETLAND MITIGATION IN LOS ANGELES AND VENTURA COUNTIES: ASSESSING PERMIT COMPLIANCE AND WETLAND CONDITION. R.F. Ambrose and S.F. Lee. Environmental Science and Engineering Program and Department of Environmental Health Sciences, University of California, Los Angeles, CA 90095-1772.
- 11 4:20 DEVELOPMENT OF AN INTEGRATED REGIONAL ASSESSMENT PROGRAM FOR SOUTHERN CALIFORNIA WETLANDS. E.D. Stein, M. Sutula, and A.E. Fetscher. Southern California Coastal Water Research Project, 7171 Fenwick Lane, Westminster, CA 92683.
- 12 4:40 MONITORING PLAN FOR THE SAN DIEGUITO LAGOON RESTORATION PROJECT. Page, H. M., S. C. Schroeter, D. C. Reed, R. F. Ambrose, and M. A. Steele. Marine Science Institute, University of California, Santa Barbara, CA, 93106, Environmental Science and Engineering Program, University of California, Los Angeles, CA, 90095.

Friday, May 20, 2005

Location: Hilton Business Center, Room 103

Session: Ecology of Nearshore Reefs

Chair: Daniel Pondella, Occidental College and Bob Grove, S.C Edison

- 13 8:40 **QUANTIFYING THE PERFORMANCE OF DIFFERENT REEF DESIGNS ON KELP BED FISH AND BENTHIC COMMUNITY DEVELOPMENT AT THE SAN CLEMENTE EXPERIMENTAL ARTIFICIAL REEF.** Dan Reed¹, Stephen Schroeter¹, David Huang¹, Todd Anderson², and Robert Grove³. ¹Marine Science Institute, University of California, Santa Barbara, CA 93106. reed@lifesci.ucsb.edu; ²Department of Biology, San Diego State University, San Diego CA 92182; ³Southern California Edison Company, Rosemead, CA 91770. grovers@sce.com.
- 14 9:00 **EVALUATION OF KELP (*MACROCYSTIS PYRIFERA* (L.) C. AGARDH) KELP RESTORATION OFF TAJIGUAS, CALIFORNIA USING SCATTERED GRANITIC BOULDERS IN A SAND HABITAT.** D. C. Barilotti, D. C. Lees and D. M. Schroeder. Sea Foam Enterprises, San Diego CA 92107. seafoam@mindspring.com; Littoral Ecological & Environmental Services, Leucadia, CA 92024. dennislees@earthlink.net; Marine Science Institute, UCSB, Santa Barbara 92106. schroed@lifesci.ucsb.edu.
- 15 9:20 **"FLOATING" BEHAVIOR OF GRANITIC BOULDERS USED TO CONSTRUCT THE TAJIGUAS KELP HABITAT ON A SAND PLAIN AND COMPARISON OF THE DEVELOPING EPIBIOTIC INVERTEBRATE ASSEMBLAGE WITH NEARBY NATURAL REEF ASSEMBLAGES.** Dennis C. Lees and D. Craig Barilotti. Littoral Ecological & Environmental Services, Leucadia, CA 92024 and Sea Foam Enterprises, San Diego, CA 92107.
- 16 9:40 **COMPARISON OF REEF FISH ASSEMBLAGES AMONG NATURAL ROCK HABITATS AND THE CREATED TAJIGUAS KELP HABITAT IN THE SANTA BARBARA CHANNEL.** D. M. Schroeder and D. C. Barilotti. Marine Science Institute, University of California, Santa Barbara, CA 93106. schroed@lifesci.ucsb.edu; and Sea Foam Enterprises, 4369 Osprey Street San Diego CA 92107.
- 17 E 10:00 **POSITIVE INDIRECT EFFECTS OF REEF FISHES ON GIANT KELP PERFORMANCE.** Davenport, Andrew C. San Diego State University.
- 18 10:20 **MARINE RESERVE DESIGN: DETERMINING AN OPTIMAL SIZE AND LOCATION.** P.E. Parnell¹, Paul K. Dayton¹, and Cleridy Lennert-Cody². ¹Scripps Institution of Oceanography, UCSD, La Jolla, CA 92093-0227; ²Inter-American Tropical Tuna Commission, 8604 La Jolla Shores Drive, La Jolla, CA 92037-1508.
- 10:40–11:00 **BREAK**
- 11:00–11:30 **Welcome, Student Grant Awards.**
- 11:30–12:30 **Plenary Talk: Dr. Brian Fagan: Fish on Friday: How the Catholic Doctrine of eating Fish on Friday changed History.**
- 12:30–1:40 **LUNCH BREAK**
- 19 F 1:40 **BEHAVIORAL THERMOREGULATION OF THE LEOPARD SHARK (*TRIAKIS SEMIFACIATA*) IN THE NEARSHORE EMBAYMENTS OF SANTA CATALINA ISLAND, CALIFORNIA.** B.V. Ziegler, California State University Long Beach, Department of Biological Sciences, Long Beach, CA, 90840-3702.
- 20 E 2:00 **MOVEMENT PATTERNS AND HABITAT USE OF OCEAN WHITEFISH (*BRANCHIOSTEGIDAE*) IN A SANTA CATALINA ISLAND MARINE RESERVE.** Bellquist, L.F.¹, C.G. Lowe², and J.E. Caselle³. ^{1,2}California State University Long Beach, Department of Biological Sciences, Long Beach, CA 90840; ³Marine Science Institute, University of California Santa Barbara, Santa Barbara, CA 93106.
- 21 2:20 **THE FISH ASSEMBLAGES OF AN ARTIFICIAL AND NATURAL REEF IN THE HORSESHOE KELP.** J.T. Froeschke¹, B.M. Haggin², D.J. Pondella¹ and L.J. Allen. ¹Vantuna Research Group, Occidental College, Department of Biology, Los Angeles, CA, 90041; ²Nearshore Marine Fish Research Program, California State University, Northridge, Department of Biology, Northridge CA, 91330.

- 22 2:40 **EFFECTS ON NEARSHORE ROCKY REEFS FOLLOWING THE REGIONAL BEACH SAND PROJECT.** L. Honma¹, B. Snyder², and R. Rundle³. ¹Merkel & Associates, 5434 Ruffin Rd, San Diego, CA 92123; ²AMEC Earth & Environmental, 5510 Morehouse Dr., San Diego, CA 92121; ³San Diego Association of Governments (SANDAG), 401 B Street Suite 800, San Diego, CA 92101.
- 3:00 **BREAK**
- 23 3:20 **EVALUATION OF EELGRASS MITIGATION AND FISHERY ENHANCEMENT STRUCTURES IN SAN DIEGO BAY, CALIFORNIA.** D. J. Pondella, II¹, L. G. Allen², M. T. Craig³ and B. Gintert⁴. ¹Vantuna Research Group, Department of Biology, Occidental College, Los Angeles, CA 90041; ²Department of Biology, California State University, Northridge, CA 91330-8303; ³Scripps Institution of Oceanography, La Jolla, CA 92093-0208; ⁴Rosenstiel School of Marine and Atmospheric Science, Marine Biology and Fisheries Division, Miami, FL 33149.
- 24 3:40 **LESSONS LEARNED, A HALF-CENTURY OF GIANT KELP RESTORATION IN SOUTHERN CALIFORNIA.** Mike Curtis. MBC Applied Environmental Sciences.
- 25 E 4:00 **GIANT KELP RESTORATION AND MONITORING IN SANTA MONICA BAY.** T. Ford. Santa Monica Baykeeper, P.O. Box 10096, Marina del Rey, CA 90295.

Friday, May 20, 2005

Location: Hilton Business Center, Room 107

Session: Contributed Papers

Chair: Don Buth, UCLA

- 26 M 9:00 **COMPARISON OF DIGESTIVE ENZYME ACTIVITIES IN TUNAS AND THEIR ECTOTHERMIC RELATIVES.** D. L. Neumann and K. Dickson. California State University, Fullerton, Department of Biology, Fullerton, CA, 92831.
- 27 E 9:20 **STRUCTURAL COMPLEXITY OF SEAGRASS INFLUENCES PATTERNS OF RECRUITMENT OF FISHES IN SAN DIEGO BAY.** Lipski, D.M. San Diego State University, San Diego, CA, 92182.
- 28 9:40 **TRANSITIVITY AND SONG PREFERENCES IN THE HOUSE CRICKET, *ACHETA DOMESTICUS*.** Sean E. Walker¹ and J. Andrew Roberts². ¹Department of Biological Science, California State University Fullerton; ²Department of Evolution, Ecology, and Organismal Biology, The Ohio State University, Newark.
- 29 9:40 **ACOUSTIC TRACKING AND MONITORING OF CULTURED JUVENILE WHITE SEABASS RELEASED INTO SOUTHERN CALIFORNIA EMBAYMENTS.** M. A. Shane¹, M. A. Drawbridge¹, and H. C. Simonds². ¹Hubbs-SeaWorld Research Institute, 2595 Ingraham Street, San Diego, CA, 92109; ²San Diego State University Foundation, 5250 Campanile Drive, San Diego, CA 92182.
- 30 M 10:20 **LACTATE PROCESSING IN ENDOTHERMIC AND ECTOTHERMIC SHARKS.** J.M. Backey and K.A. Dickson. California State University, Department of Biological Science, Fullerton, CA, 92831.

Friday, May 20, 2005

Location: Hilton Business Center, Room 107

Session: Archaeology and Paleontology of Southern California

Chair: Andrea P. Murray, California State University, Fullerton

- 31 1:40 **LATE PREHISTORIC CERAMIC PRODUCTION IN THE UPPER MOJAVE RIVER REGION, SAN BERNADINO COUNTY, CALIFORNIA.** B. Travis. Department of Anthropology, California State University, Fullerton, CA 92831.
- 32 2:00 **ARCHAEOFAUNAL RESEARCH AT LATE HOLOCENE PREHISTORIC SITES ON SAN NICOLAS ISLAND: RECENT EXCAVATIONS AND EXPERIMENTAL STUDIES.** Steven R. James and James R. Wallace. Department of Anthropology, California State University at Fullerton, P.O. Box 6846, Fullerton, CA 92834-6846.

- 33 2:20 **ARCHAEOLOGY AT THE HARVARD HILL SITE, SAN BERNARDINO COUNTY, CALIFORNIA.** J.A. McKenna. McKenna et al., Whittier, CA 90601-3724.
- 34 2:40 **TWO RITUAL CACHES FROM CA-ORA-950: A WINDOW ONTO THE SYMBOLOGY OF COGGED STONES.** H. C. Koerper. Cypress College, Cypress, CA 90630.
- 3:00 **BREAK**
- 35 3:20 **PREHISTORIC ADAPTATIONS TO COASTAL WETLANDS: AN 8,000 YEAR VIEW FROM SANTA MONICA BAY, WEST LOS ANGELES.** John G. Douglass, Jeffrey H. Altschul, Richard Ciolek-Torrello, Benjamin R. Vargas, and Donn R. Grenda. Statistical Research, Inc. 21 West Stuart Ave Redlands, CA 92373.
- 36 3:40 **OPTIMAL RESOURCE PRODUCTION: A MODEL OF CHUMASH IMPACT ON THE ENVIRONMENT IN THE SANTA BARBARA CHANNEL AREA.** Edgar H. Huerta. Department of Anthropology, California State University, Fullerton, 800 N. State College Blvd, Fullerton, CA 92831.
- 37 4:00 **"JUNE GLOOM" AND "TULE FOG": CONSIDERATIONS OF THE IMPORTANCE OF CLOUD MOISTURE FOR PREHISPANIC SETTLEMENT AND SUBSISTENCE STRATEGIES IN SOUTHERN CALIFORNIA.** Frederick W. Lange, PhD. LSA Associates—Riverside Office.
- 38 4:20 **PALEOCLIMATE AND VEGETATION RECORD IN THE LATE PLEISTOCENE PALOS VERDES FORMATION ("OLDER ALLUVIUM") IN THE SAN FERNANDO VALLEY, SOUTHERN CALIFORNIA.** L.H. Fisk. PaleoResource Consultants, 5325 Elkhorn Boulevard, #294, Sacramento, CA 95842.
- 39 4:40 **REVISED CORRELATION AND AGE ASSIGNMENTS OF FOSSIL LAND MAMMAL ASSEMBLAGES OF LATE HEMINGFORDIAN TO EARLIEST HEMPHILLIAN (EARLY MIDDLE TO EARLY LATE MIOCENE) AGE IN CALIFORNIA, NEBRASKA, AND TEXAS, BASED ON OCCURRENCES OF TICHOLEPTINE ORODONTIDS (MAMMALIA, ARTIODACTYLA, ORODONTIDAE, TICHOLEPTINAE) AND OTHER LAND MAMMAL TAXA.** E.B. Lander. Paleo Environmental Associates, Inc., 2248 Winrock Avenue, Altadena, CA, 91001-3205.

Friday, May 20, 2005

Location: Hilton Business Center, Room 300

Time: 5-7 p.m.

Session: Poster Session and Social

- 40 P **CACHE OF FOSSIL REMAINS FOUND IN SAN QUINTIN, BAJA CALIFORNIA LOCATED WITHIN A BEACH CLIFF CAVE.** G. Pacheco-Ambroz. Baja California Independent Research Project, Pasadena City College, Department of Natural Science, Pasadena, CA 91003.
- 41 **ADSORPTION OF SYNTHETIC PYRETHROIDS ON SEDIMENT.** S. Bondarenko, S. Qin and J. Gan. Department of Environmental Sciences, University of California, Riverside, CA 92521.
- 42 M **SURVEY FOR SYNTHETIC PYRETHROIDS WITHIN THE SAN DIEGO/NEWPORT BAY WATERSHED.** R.L. Budd, S. Bondarenko, and J. Gan. University of California at Riverside, Riverside, CA 92521.
- 43 E **THE EFFECT OF FEMALE CHEMICAL CUES ON THE AGGRESSIVE BEHAVIOR OF MALE CRICKETS, *ACHETA DOMESTICUS*.** Leslie J. Buena and Sean E. Walker. Department of Biological Science, California State University, Fullerton. Fullerton, Ca 92831.
- 44 E **THE EFFECTS OF ARTICHOKE THISTLE (*CYNARA CARDUNCULUS*) DENSITY AND COASTAL SAGE SCRUB INFLUENCE ON PREDATION OF ARTIFICIAL NESTS.** Andres Carrillo and Leslie Buena. Department of Biological Science, California State University, Fullerton.
- 45 **SEWAGE IS AN UNLIKELY SOURCE OF FECAL INDICATOR BACTERIA IN THE LOWER SANTA ANA RIVER WATERSHED.** D.L. Young, J. A. Noblet², E. Y. Zeng^{1,3} and S. Ensari³. ¹Southern California Coastal Water Research Project, Westminster, California; ²California State University, San Bernardino, California; and ³University of California, Irvine, California.

- 46 DESCRIPTION OF FIELD-COLLECTED LARVAE OF TWO NATIVE FRESHWATER SOUTHERN CALIFORNIA FISHES, *CATOSTOMUS SANTAANAE* AND *GILA ORCUTTI*. Richard F. Feeney. Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, CA 90007; and Camm C. Swift. ENTRIX, Inc., 2140 Eastman Ave. Suite 200, Ventura, CA 93003.
- 47 E AXIAL SPLITTING OF SHRUBS IN WET AND DRY ENVIRONMENTS. C. Goedhart, G. Pongetti, S. Espino, J. Schenk. California State University, Fullerton, Department of Biology.
- 48 EVALUATION OF METHODS FOR DETERMINING CHRONIC TOXICITY IN MARINE SEDIMENTS. D. Greenstein¹, S. Bay¹, B. Anderson², B. Phillips², G. T. Chandler³, D. Farrar⁴, A. H. Ringwood⁵, and C. Keppler⁶. ¹Southern California Coastal Water Research Project, Westminster CA; ²University of California Davis, Monterey, CA; ³University of South Carolina, Columbia, SC; ⁴US Army Engineer Research and Development Center, Vicksburg, MS; ⁵University of North Carolina-Charlotte, Charlotte, NC; ⁶Marine Resources Research Institute, Charleston, SC.
- 49 E LACK OF GENDER-BIASED MICROSITE PATTERNS IN *SALIX LASIOLEPIS*. Shannon Harsh and Allison Roth, Dustin Taylor and Cheryl Swift. Whittier College, Department of Biology, Whittier, CA 90608.
- 50a E MORPHOLOGY AND MOLECULAR PHYLOGENY OF *EGREGIA MENZIESII*. Henkel, S.K., G.E. Hofmann, and A.C Whitmer. Marine Science Program, Department of Ecology, Evolution, and Marine Biology, University of California, Santa Barbara 93106.
- 50b M BIOAVAILABILITY OF PERMETHRIN IN SEDIMENTS AND ESTIMATED WITH SOLID PHASE MICROEXTRACTION (SPME). W. Hunter, W. Yang, and J. Gan. University of California, Riverside, Riverside, CA 92521.
- 51 P PRELIMINARY ANALYSIS OF A CAVE FAUNA FROM SAN QUINTIN, BAJA MEXICO. A.J. Jenkins. Baja California Independent Research Project, Pasadena City College, Department of Natural Science, Pasadena, CA 91106.
- 52 M BOLUS REBOUND KINEMATICS DURING ENGULFMENT FEEDING IN THE RORQUAL WHALES. B.W. Kot. Department of Ecology and Evolutionary Biology, UCLA, Los Angeles, CA 90095.
- 53 THE GREATEST GRUNION HUNT IN 50 YEARS: CALIFORNIA GRUNION SIGHTINGS ACROSS THE SEASON AND ALONG THE COAST IN 2004. K. Martin, B. Cupp, and P. Johnson. Pepperdine University, Malibu, CA 90263-4321.
- 54 E INTERACTIONS OF NEARSHORE FISH ASSEMBLAGES AND NET-PEN MARICULTURE EFFORTS ON SANTA CATALINA ISLAND, CALIFORNIA. C.T. Oakes and D.J. Pondella, II. Vantuna Research Group, Occidental College, Department of Biology, Los Angeles, CA 90041.
- 55 A COMPARISON OF PREVALENCE AND MEAN INTENSITY OF THE ECTOPARASITE *ELTHUSA CALIFORNICA* IN SHINER SURFPERCH (*CYMATOGASTER AGREGATA*) OF TOMALES AND BODEGA BAYS. Pritchard, Justin, Will Madrid, and Nick Weston-Swan. UCLA, Department of Ecology and Evolutionary Biology, Los Angeles, CA 90024.
- 56 ANALYSIS OF HISTORICAL CHLORDANE LEVELS IN SAN DIEGO AND MISSION BAY IN COMPARISON TO THE THRESHOLD LEVEL OF TOXICITY TO THE AMPHIPOD, *EOHAUSTORIUS ESTUARIUS*. Y. Rodriguez^{1,2}, J. Rudolph², C. Stransky². ¹San Diego State University; ²Nautilus Environmental, San Diego, CA.
- 57 SEASONAL BACTERIAL CONCENTRATIONS IN THE LONG BEACH/LOS ANGELES HARBOR COMPLEX; YEAR TWO OF A FIVE YEAR STUDY. K.A Snow, K.E. Flaherty, Y.J. Ralph, C.V. Wolfe, K. Kull and R.E. Pieper. Southern California Marine Institute, Terminal Island, CA 90731.
- 58 M INDEPENDENT AND JOINT TOXICITY OF PERCHLORATE AND HEXAVALENT CHROMIUM TO LARVAL MOSQUITOES. M.A. Sorensen and J.T. Trumble. University of California, Riverside, Riverside, CA 92521.
- 59 E VARIATION OF JOSHUA TREE MORPHOLOGY AMONG POPULATIONS IN THE EASTERN MOJAVE DESERT. Tracy Valentovich and Darren Sandquist. California State University, Fullerton. Fullerton, CA, 92831.

- 60 **ENDOCRINE DISRUPTION IN SOUTHERN COASTAL CALIFORNIA FLAT-FISH.** D.E. Vidal¹, J. Armstrong², M. Baker³, J. Gully⁴, M. Irwin⁵, K.M. Kelley⁶, D. Montagne⁴, J. Reyes⁶, D. Schlenk⁵, S.M. Bay¹. ¹Southern California Coastal Water Research Project, Westminster, CA; ²Orange County Sanitation District, Fountain Valley, CA; ³University of California at San Diego, La Jolla, CA; ⁴Los Angeles County Sanitation District, Whittier, CA; ⁵University of California at Riverside, Riverside, CA; ⁶California State University at Long Beach, Long Beach, CA.
- 61 **HPLC COLUMNS WITH MODIFIED MONOSACCHARIDE DERIVATIVES AS CHIRAL SELECTOR.** L. Wenjian¹ and L. Tingyu². ¹ University of California, Riverside, CA. ² Mississippi State University, Mississippi State, MS.
- 62 **BIOAVAILABILITY OF SYNTHETIC PYRETHROIDS IN SURFACE WATER.** W. Yang, W. Hunter, and J. Gan. University of California, Riverside, Riverside, CA 92521.
- 63 **STRAIN RELATEDNESS OF *CANDIDA* IN HUMANS: A URINARY PATHOGEN OR COLONIZER? (PHASE 1).** Joon-Bok Lee. California Academy of Math and Science and Division of Infectious Diseases, Los Angeles County Harbor-UCLA Medical Center, 1000 W. Carson Street, Torrance, California 90502.
- 64 **EFFECTS OF PHOSPHATE ON THE BIOLOGICAL PROCESSES OF TRICHODESMIUM.** S.F. Ong¹, J. Sohm², and D. Capone². ¹California Academy of Mathematics and Science, Carson, CA; ²Wrigley Institute of Environmental Biology, University of Southern California, Department of Biological Sciences, Los Angeles, CA.
- 65 **DETERMINATION OF BACTERIAL AND POLLUTANT FLOWS IN COASTAL ESTUARIES OF SOUTHERN CALIFORNIA.** S. Yanamadala and J. Dorsey. Chadwick School and Loyola Marymount University, Department of Natural Sciences, Los Angeles, CA. 90045.
- 66 **NEAR REAL-TIME DETECTION OF *ESCHERICHIA COLI* FOR MONITORING BEACH WATER QUALITY.** J. Jay. University of California, Los Angeles, Los Angeles, California.
- 67 M **INDIVIDUAL AND JOINT EFFECTS OF SELENATE AND METHYLMERCURY ON A TERRESTRIAL INSECT DETRITIVORE.** P.D. Jensen and J.T. Trumble, University of California, Riverside, Riverside, CA.
- 68 **HEAVY METALS IN THE CLAM *MEGALITARIA SQUALIDA* FROM APPARENTLY POLLUTION-FREE ZONES IN BAJA CALIFORNIA, MEXICO: CONSIDERATIONS FOR HUMAN HEALTH EFFECTS.** L. Méndez, E. Palacios, B. Acosta, P. Monsalvo-Spencer, and S.C. Gardner. Centro de Investigaciones Biológicas del Noroeste, S.C., La Paz, Baja California Sur, Mexico.
- 69 **SUSCEPTIBILITY OF OXIDATIVELY CROSSLINKED β -AMYLOID PEPTIDES TO INSULIN DEGRADING ENZYME.** J. Young. Alhambra High School and USC Keck School of Medicine, School of Pharmacy, Department of Pharmaceutical Science, Los Angeles, CA, 90089.

Saturday, May 21, 2005

Location: Hilton Business Center, Rm. 103

Session: Fire Ecology

Chair: Ruth Wilson

- 8:50 **INTRODUCTION, RUTH WILSON**
- 71 9:00 **THE HISTORY OF WILDLAND FIRES IN AMERICA.** R.J. Vogl. Biology Department, California State University, Los Angeles 90032.
- 72 9:20 **ECONOMIC IMPACT OF WILDLAND FIRES.** Armando González-Cabán. USDA Forest Service, Pacific Southwest Research Station, Forest Fire Laboratory, 4955 Canyon Crest Drive, Riverside, California 92507.
- 73 9:40 **POST-FIRE EROSION IN THE SAN GABRIEL MOUNTAINS.** P.M. Wohlgemuth. USDA Forest Service, Pacific Southwest Research Station, 4955 Canyon Crest Drive, Riverside, CA 92507.

- 74 10:00 **NEW TRICKS ON THE OLD FIRE.** Fujioka, Francis M. USDA Forest Service, Forest Fire Laboratory, 4955 Canyon Crest Drive, Riverside, CA 92507.
- 75 10:20 **STRATEGIC FIRE MAPPING—TECHNOLOGY DEVELOPMENT FOR AIRBORNE REMOTE SENSING OF WILDLAND FIRES.** Philip J. Riggan. USDA Forest Service, PSW Research Station, 4955 Canyon Crest Drive Riverside, CA 92507.
- 10:40 **BREAK**
- 11:00 **Plenary Talk: Dr. James Powell: The Grand Canyon: Solving Earth's Grandest Puzzle.**
- 12:00–1:20 **LUNCH BREAK**

Saturday, May 21, 2005

Location: Hilton Business Center, Rm. 103

Session: Fire Ecology (Continued)

Chair: M. Narog

- 76 1:20 **CHANGES IN SPATIAL DISTRIBUTION AND ABUNDANCE OF BIRDS IN RELATION TO FIRE AND DROUGHT-INDUCED VEGETATION MORTALITY IN SOUTHERN CALIFORNIA.** Rechel, Jennifer L. USDA Forest Service, Pacific Southwest Research Station, Forest Fire Laboratory, Riverside, CA, USA 92507-6071.
- 77 1:40 **THE CONTRIBUTION OF FOREST INSECTS AND PATHOGENS TO TREE MORTALITY IN SOUTHERN CALIFORNIA MONTANE FORESTS.** L.D. Merrill. USDA Forest Service, 4955 Canyon Crest Drive, Riverside, CA 92507.
- 78 2:00 **WILDFIRE AFFECTS SOUTHERN CALIFORNIA RIPARIAN HABITAT.** M. G. Narog, C. J. Sclafani, and J. L. Beyers. USDA Forest Service, Pacific Southwest Research Station, Riverside, CA.
- 79 2:20 **SAN DIEGO FIRE RECOVERY NETWORK: WORKING AND LEARNING TOGETHER.** M. McElhinney, San Diego Fire Recovery Network; and A.S. Fege, San Diego Natural History Museum, Box 121390, San Diego, CA 92112.
- 2:40 **Concluding Panel; Marcia Narog.**

Saturday, May 21, 2005

Location: Hilton Business Center, Rm. 107

Session: Avian Research in Southern California

Chair: Kathy Keane, Keane Biological

- 80 8:40 **HOW ISLAND SCRUB-JAYS ATTAIN BREEDING STATUS IN LIMITED HABITAT.** K. A. Corey, C.T. Collins. U.S. Fish and Wildlife Service, Carlsbad Field Office, Carlsbad, CA 92009; Department of Biological Sciences, California State University, Long Beach, CA 90840.
- 81 E 9:00 **POPULATION GENETICS OF PYGMY NUTHATCHES IN SOUTHERN CALIFORNIA.** T. A. Benson and A. E. Metcalf. Department of Biology, California State University, 5500 University Parkway, San Bernardino, CA 92407.
- 82 9:20 **SEASONAL AND INTERANNUAL MOVEMENTS OF SALTON SEA-HATCHED BLACK SKIMMERS (*RYNCHOPS NIGER*).** K. C. Molina and K. L. Garrett. Natural History Museum of Los Angeles County, Los Angeles, CA 90007; C. T. Collins. California State University, Long Beach, CA 90840.
- 83 9:40 **OVER-WINTERING BEHAVIOR OF BLACK SKIMMERS IN SOUTHERN CALIFORNIA: SITTERS AND WANDERERS.** C. T. Collins, K. Molina and K. L. Garrett. Department of Biological Sciences, California State University, Long Beach, CA 90840; and Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, CA 90007.

- 84 10:00 AVIAN EXTIRPATION AND COLONIZATION IN THE BALLONA VALLEY, LOS ANGELES COUNTY, CALIFORNIA. Daniel S. Cooper. Audubon California, 11340 W. Olympic Blvd., Suite 209, Los Angeles, CA 90064.
- 85 10:20 CHANGES IN BIRD SPECIES DIVERSITY FOLLOWING A SALTMARSH RESTORATION PROJECT AT BATIQUITOS LAGOON. K.M. Keane. Keane Biological Consulting, 2892 N. Bellflower Blvd., Suite 480, Long Beach, CA 90815.
- 10:40–11:00 BREAK
- 11:00–12:00 Plenary Talk: Dr. James Powell: The Grand Canyon: Solving Earth's Grandest Puzzle.
- 12:00–1:20 LUNCH BREAK

Saturday, May 21, 2005

Location: Hilton Business Center, Rm. 107

Session: What's the Status of our Special-Status Bird Species?

Chair: Kathy Keane, Keane Biological

- 86 1:20 SPECIAL STATUS BIRDS OF THE WHITTIER NARROWS BASIN, LOS ANGELES COUNTY. M.C. Long. Los Angeles County Natural Areas, 1750 N. Altadena Dr., Pasadena, CA 91107.
- 87 1:40 POPULATION STATUS OF ROYAL TERNS IN SOUTHERN CALIFORNIA. G. T. Collins. Department of Biological Sciences, California State University, Long Beach, CA 90840.
- 88 2:00 POPULATION STATUS OF THE CALIFORNIA LEAST TERN. K.M. Keane. Keane Biological Consulting, 2892 N. Bellflower Blvd., Suite 480, Long Beach, CA 90815.
- 89 2:20 LEAST BELL'S VIREO IN THE SANTA ANA RIVER WATERSHED. R. Zembal. Orange County Water District, 10500 Ellis Avenue, Fountain Valley, CA 92708.
- 90 2:40 POPULATION STATUS OF THE WESTERN GULL-BILLED TERN (*STERNA NILOTICA VANROSSEMI*) IN NORTH AMERICA. K. C. Molina. Ornithology, Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, CA 90007.
- 3:00–3:20 BREAK
- 91 3:20 POPULATION STATUS OF LIGHT-FOOTED CLAPPER RAIL. R. Zembal, S.M. Hoffman, and J. Konecny. Department of Biological Sciences, CA State University, Long Beach 90840.
- 92 3:40 THE STATUS OF WESTERN SNOWY PLOVERS IN COASTAL SOUTHERN CALIFORNIA. Kevin B. Clark. U.S. Fish and Wildlife Service, Carlsbad, CA 92009.
- 93 E 4:00 DIETARY RESPONSE OF THE ELEGANT TERN (*STERNA ELEGANS*) TO CHANGING OCEAN CONDITIONS AND PREY POPULATIONS IN SOUTHERN CALIFORNIA. K. L. Connell and M. H. Horn. California State University, Fullerton, Department of Biological Science, Fullerton, CA 92834.

Saturday, May 21, 2005

Location: Hilton Business Center, Rm. 109

Session: Contributed Papers

Chair: Jon Baskin

- 94 E 8:40 GAS EXCHANGE RESPONSES TO PULSE RAIN EVENTS BY A NATIVE HAWAIIAN DRY FOREST VINE AND THE EFFECT OF INTERACTION WITH NON-NATIVE GRASSES. P.A. Koenig and D.R. Sandquist. Department of Biological Science, California State University, Fullerton, CA 92831.
- 95 E 9:00 BORN AND RAISED IN SOUTHERN CALIFORNIA: DEVELOPMENTAL EVOLUTION AND CRYPTIC SPECIATION IN THE SEA SLUG GENUS *ALDERIA*. R.A. Ellingson and P.J. Krug. California State University Los Angeles, Department of Biological Sciences, Los Angeles, CA 90032.

- 96 E 9:20 **SHALLOW SURF RIDERS: SMALL-SCALE LARVAL DISTRIBUTION IN ESTUARINE WATERS.** D.A. Willette and P.J. Krug. California State University, Los Angeles, Department of Biological Sciences, Los Angeles, CA 90032.
- 97 9:40 **RAPID ASSESSMENT OF TERRESTRIAL AND MARINE HABITATS USING TWO NOVEL METHODS FOR ESTIMATING THE DENSITIES AND DISTRIBUTIONS OF ORGANISMS.** G.K. Nishiyama and C.A. Kay. College of the Canyons, Department of Biology, Santa Clarita, CA 91355.
- 98 10:00 **ON SOUTHERN CALIFORNIA ABYSSAL ECHINODERMS.** K.D. Trego. Nautilus Oceanic Institute, La Jolla, CA 92037.
- 99 10:20 **THE DEEP SEA HOLOTHURIAN SCOTOPLANES GLOBOSA OFF SOUTHERN CALIFORNIA.** K.D. Trego. Nautilus Oceanic Institute, La Jolla, CA 92037.

Saturday, May 21, 2005

Location: Hilton Business Center, Rm. 100

Session: SETAC Plenary Session; "New Frontiers in Environmental Chemistry"

Chair: Lan Wiborg, City of San Diego

- 100 8:40 **TOOLS FOR TRACKING THE FATE OF WASTEWATER-DERIVED CONTAMINANTS IN EFFLUENT-DOMINATED WATERS.** David L. Sedlak. University of California, Berkeley, CA.
- 101 9:20 **CONTAMINANT FATE AND SOURCE TRACKING USING CHIRAL AND STABLE ISOTOPE ANALYSIS.** Kieth Maruya, K.A.* and Peng, J., SCCWRP, Westminster, CA; Zeng, E.Y., Chinese Academy of Sciences, Guangzhou, China.
- 102 10:00 **CHEMICAL METHODS FOR MEASURING BIOAVAILABILITY.** Jay Gan. Department of Environmental Science, University of California, Riverside.
- 10:40–11:00 **BREAK**
- 11:00–12:00 **Plenary Talk: Dr. James Powell: The Grand Canyon: Solving Earth's Grandest Puzzle.**
- 12:00–1:20 **LUNCH BREAK**

Saturday, May 21, 2005

Location: Hilton Business Center, Rm. 100

Session: Marine Pollution: Contaminants, Bioaccumulation and Effects on Marine Organisms (Jointly sponsored by SCAS and SETAC)

Chair: Jim Allen and Ken Schiff, (SCCWRP)

- 103 1:20 **WATER QUALITY ON SWIMMING BEACHES: NEW DIRECTIONS FOR THE EUROPEAN UNION.** A. Staines. Urban Water Technology Centre, University of Abertay Dundee, Bell St. Dundee, DD1 1HG, Scotland, United Kingdom.
- 104 1:40 **CONTAMINANT TRENDS IN THE SOUTHERN CALIFORNIA BIGHT: A MUSSEL WATCH UPDATE.** A. J. Mearns and G. Lauenstein. National Ocean Service, National Oceanic and Atmospheric Administration, Seattle, WA and Silver Spring, MD.
- 105 2:00 **A COMPARISON OF TRACE METAL CONCENTRATIONS IN DEEP OFFSHORE AND NEARSHORE SEAWATER FROM SOUTHERN CALIFORNIA.** Richard Gossett. CRG Marine Laboratories, 2020 Del Amo Blvd, Torrance, CA 90501.
- 106 2:20 **HEAVY METAL ACCUMULATION IN SEA TURTLES FROM THE BAJA CALIFORNIA PENINSULA, MEXICO.** S.C. Gardner, S.L. Fitzgerald, B. Acosta Vargas L. Méndez Rodríguez. Centro de Investigaciones Biológicas del Noroeste, S.C., La Paz, Baja California Sur, Mexico.

- 107 2:40 **PROBING METAL-LIGAND INTERACTIONS USING STABLE ISOTOPICALLY LABELED PROTEINS AND DIRECTLY COUPLED HPLC-ICP-MS.** A.Z. Mason, T.M. Potter, J. Webster, and R.F. Meraz. Department of Biological Sciences and Institute for Integrated Research in Materials, Environments and Society, California State University, Long Beach, 90840, USA.
- 3:00 **BREAK**
- 108 3:20 **STRATIFYING BAY AND ESTUARY HABITATS OF THE WEST COAST OF THE CONTIGUOUS USA: A STEP TOWARD REGIONAL INDICATORS OF BENTHIC COMMUNITY CONDITION.** J.A. Ranasinghe¹, K.I. Welch², P.N. Slattery³, D.E. Montagne⁴, D.D. Huff⁵, H. Lee, II⁶, J.L. Hyland⁷, B. Thompson⁸, S.B. Weisberg¹, J.M. Oakden³. ¹SCCWRP, Westminster, CA; ²Washington State Department of Ecology, Olympia, WA; ³Moss Landing Marine Laboratory, Moss Landing, CA; ⁴County Sanitation Districts of Los Angeles County, Whittier, CA; ⁵Oregon Dept. of Environmental Quality, Portland, OR; ⁶US EPA, Western Ecology Division, Newport, OR; ⁷NOAA, NOS, Charleston, SC; ⁸San Francisco Estuary Institute, Oakland, CA.
- 110 3:40 **DISRUPTION OF THE STRESS RESPONSE ENDOCRINE SYSTEM IN MARINE FISHES IN THE SOUTHERN CALIFORNIA BIGHT.** Kevin M. Kelley, Jesus A. Reyes, Kathy Sak, Shari Smolko, and Jeffery L. Armstrong*. Department of Biological Sciences, California State University, Long Beach, Long Beach, CA 90840; *Orange County Sanitation District (OCS), Fountain Valley, CA, 92708.
- 111 4:00 **GROWTH ENDOCRINE DISRUPTION IN SOUTHERN CALIFORNIA MARINE FLATFISH.** Jesus A. Reyes and Kevin M. Kelley. Department of Biological Sciences, California State University, Long Beach, Long Beach, CA 90840.
- 109 F 4:20 **INFESTATION OF PARASITIC COPEPODS AND THE POTENTIAL OF STRESS ON HOST FISHES.** Julianne E. Kalman. University of California Los Angeles, Department of Ecology and Evolutionary Biology, Los Angeles, CA 90095 and Orange County Sanitation District, Environmental Assessment Division, Fountain Valley, CA 92708.
- 112 4:40 **BIOACCUMULATION OF CONTAMINANTS IN RECREATIONAL AND FORAGE FISHES IN NEWPORT BAY, CALIFORNIA IN 2000-2002.** M. J. Allen¹, D. W. Diehl¹, and E. Y. Zeng². ¹Southern California Coastal Water Research Project, Westminster, CA 92683; ²State Key Laboratory of Organic Geochemistry, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, P.O. Box 1131, Guangzhou 51064, China.

Saturday, May 21, 2005

Location: Business Center, Rm. 109

Session: Environmental Toxicology and Chemistry (SETAC)

Chair: Jeff Armstrong, Orange County Sanitation District

- 113 1:20 **OXIDATION OF SELENOMETHIONINE BY FLAVIN-CONTAINING MONOOXYGENASES (FMOS).** D. Shi and D. Schlenk. University of California, Riverside, Riverside, CA 92521.
- 114 1:40 **ENANTIOSELECTIVITY IN PYRETHROID DEGRADATION IN SOIL.** S. Qjn, M. G. Nillos, and J. Gan. University of California, Riverside, Riverside, CA 92521.
- 115 M 2:00 **ENANTIOMERIC SULFOXIDATION OF THE ORGANOPHOSPHATE PESTICIDE FENTHION IN FISH.** O. Bawardi¹, B. Furnes, J. Rimoldi², D. Schlenk¹. ¹University of California Riverside, Riverside, CA 92521; ²The University of Mississippi, University, MS 38677.
- 116 2:20 **LINKING BIOMARKER RESPONSES AND PHYSIOLOGICAL STRESS TO GROWTH IMPAIRMENT OF CADMIUM-EXPOSED LARVAL TOPSMELT.** W. Rose¹, R. Nisbet², P. Green³, S. Norris⁴, T. Fan^{4,5}, E. Smith¹, G. Cherr¹, and S. Anderson¹. ¹Bodega Marine Laboratory, University of California Davis, Bodega Bay, CA; ²Ecology, Evolution, and Marine Biology, University of California Santa Barbara, Santa Barbara, CA; ³Civil & Environmental Engineering, ⁴Land, Air, and Water Resources, University of California Davis, Davis, CA; ⁵Chemistry, University of Louisville, Louisville, KY.

- 117 2:40 **ARTHROGRYPOSIS FOLLOWING ACRYLAMIDE EXPOSURE.** J.G. Dahlgren¹, R.T. Schmidt², and H.S. Takhar². ¹UCLA School of Medicine, Los Angeles, CA; ²James Dahlgren Medical, Los Angeles, CA.
3:00 **BREAK**
- 118 M 3:20 **EXPRESSION AND CHARACTERIZATION OF CHANNEL CATFISH CYP 2X1.** S. Mosadeghi, B. Furnes, C. Wong, D. Schlenk. University of California, Riverside, Riverside, CA 92521.
- 119 3:40 **IDENTIFYING ALUM AS A TOXICANT IN WHOLE EFFLUENT TOXICITY TESTS.** K. Rinald, P. J. Markle, C. Barton, E.X. DeHollan, and J.P. Bottomley. County Sanitation Districts of Los Angeles, Whittier, CA 90601.

Saturday, May 21, 2005

Location: Hilton Business Center, Rm. 118

**Session: Application of Freshwater Bioassessments in Southern California
(Sponsored by SETAC)**

Chair: Scott Johnson, ABC Labs, Ventura

- 120 1:40 **DEVELOPMENT OF A MACROINVERTEBRATE IBI FOR SOUTHERN COASTAL CALIFORNIA AND USE OF PROBABILISTIC SAMPLING FOR REGIONAL STREAM CONDITION ASSESSMENTS.** P. R. Ode, A. C. Rehn* and J. T. May. California Department of Fish and Game, Rancho Cordova, CA.
- 121 2:20 **ALGAE-NUTRIENT RELATIONSHIPS AND TMDL DEVELOPMENT IN MALIBU CREEK, CALIFORNIA.** S. L. Luce*¹, R.F. Ambrose² and M.A. Abramson¹. ¹Heal the Bay, Santa Monica, California; ²University of California, Los Angeles, California.
3:00 **BREAK**
- 122 3:20 **FRESHWATER STREAM INVERTEBRATES: RESPONSE TO PHYSICAL HABITAT ALTERATION AND WATER QUALITY IMPAIRMENT IN SOUTHERN CALIFORNIA.** B.H. Isham*. B.T. Ferguson Weston Solutions, Inc., Carlsbad, CA.
- 123 4:00 **THE APPLICATION OF STREAM BIOASSESSMENTS IN POINT AND NON-POINT SOURCE REGULATORY PROGRAMS.** S. Johnson.
- 124 4:20 **USE OF *IN SITU* HATCHBOX STUDIES TO EVALUATE WATER QUALITY EFFECTS.** H. Bailey¹, B. Chalmers², and J. Elphick¹. ¹Nautilus Environmental, San Diego, California; ²Myra Falls Mine, Campbell River, British Columbia.

Saturday, May 21, 2005

Location: Hilton Business Center, Rm. 300a

Session: Research Training Program: Session I

Chair: Martha Schwartz

- 125 9:40 **THE EFFECTS OF SEQUENCING: MEMORY ITEMS VS. PERCEPTUAL LEARNING.** L. Calfas¹ and P. Kellman². Marlborough School¹, Los Angeles, CA, 90004; UCLA², Department of Psychology, Los Angeles, CA, 90095.
- 126 10:00 **CREB-MUTANT PERFORMANCE IN A NOVEL LEARNING TASK.** D. Chin. Alhambra High School, Alhambra, CA. *Mentor:* Dr. Amelia Russo-Neustadt.
- 127 10:20 **OPERATIONAL EFFECTS OF ALTERED ABIOTIC FACTORS ON NITRIFYING BACTERIA: YEAR 2.** Sanjit Datta. Palos Verdes Peninsula High School and Cabrillo Marine Aquarium, San Pedro, CA 90731.
10:40 **BREAK**
11:00 **Plenary Talk: Dr. James Powell: The Grand Canyon: Solving Earth's Grandest Puzzle.**
12:00-1:20 **LUNCH BREAK**

Session: Research Training Program: Session I (Continued)

Chair: Richard Schwartz

- 128 1:20 STRAIN RELATEDNESS OF *CANDIDA* IN HUMANS: A URINARY PATHOGEN OR COLONIZER? (PHASE 2). **Joon-Bok Lee**. California Academy of Math and Science, and Division of Infectious Diseases, Los Angeles County Harbor-UCLA Medical Center, 1000 W. Carson Street, Torrance, California 90502.
- 129 1:40 MAINTAINING CORRECT BALANCE: SPATIAL CODING AND ITS DEPENDENCE ON NATURAL STIMULI. **D.E. Lluncor**. Research Training Program, Palos Verdes Peninsula High School, Rolling Hills Estates, CA, 90274.
- 130 2:00 EFFECTS OF ATMOSPHERIC CARBON DIOXIDE ON THE NITROGEN FIXATION CAPABILITIES OF *TRICHODESMIUM*. **S.F. Ong**, J. Sohm, and D.G. Capone. California Academy of Mathematics and Science, Carson, CA 90747; Wrigley Institute for Environmental Science, University of Southern California, Los Angeles, CA 90098.
- 131 2:20 USING THE INHIBITORY EFFECTS OF ATP ANALOGS TO REGULATE MRNA PROCESSING: YEAR II. **Carol Y. Suh**. Palos Verdes Peninsula High School, and University of California, Los Angeles, Department of Chemistry and Biochemistry, Los Angeles, CA, 90095.
- 132 2:40 STUDY OF THE EFFECTS OF *NEURAL LAZARILLO* OVEREXPRESSION IN TRANSGENIC *DROSOPHILA MELANOGASTER*. **Derek Tam**. Alhambra High School. *Mentor*: Julien Muffat (laboratory of Pr. Seymour Benzer).
- 3:00 BREAK
- 133 3:20 3D MODEL OF ALGORITHM PERFORMANCE ON THE 3-SATISFIABILITY PROBLEM. **Timothy Uy**, California Academy of Math and Science; and Dennis Kibler, Department of Computer Science, University of California: Irvine, Irvine, California 92697-3425.
- 134 3:40 PROSTATE CANCER PREVENTION BY POLYPHENOLIC COMPOUNDS IN GREEN TEA. **Elysia Chin**. Alhambra High School and University of Southern California, Keck School of Medicine, Los Angeles, CA, 90033.
- 4:00 Presentation by students who went to National AAJAS Meeting and student Intel Science Contestants.

Saturday, May 21, 2005

Location: Hilton Business Center, Rm. 300b

Session: Research Training Program: Session II

Chair: Kathy Phalen

- 135 9:40 IMPORTANCE OF *DROSOPHILA* EIF4E-BINDING PROTEINS IN LIFESPAN REGULATION. **Tony Au Lu**. Alhambra High School. *Mentor*: Brian M. Zid; *Teacher*: Mr. Duane Nichols.
- 136 10:00 MOTHER'S CHARACTERISTICS AND HER CHILD FEEDING HABITS. **April Stephenson** and Maivy Nguyen. Dr. Fary Cachelin, California State University Los Angeles, Department of Psychology, Los Angeles, CA, 90041.
- 137 10:20 ROLES OF AUXOTROPHIC MARKERS IN *CANDIDA ALBICANS* VIRULENCE. **D. Im**, California Academy of Math and Science; and H. Park, Division of Infectious Diseases, Department of Medicine, Los Angeles Biomedical Research Institute at Harbor-UCLA Medical Center, Torrance, CA 90502.
- 10:40 BREAK
- 11:00 Plenary Talk: Dr. James Powell: The Grand Canyon: Solving Earth's Grandest Puzzle.
- 12:00-1:20 LUNCH BREAK

Session: Research Training Program: Session II (Continued)

Chair: Harry Takahashi

- 138 1:20 **PREDICTING MATERIAL FAILURE: CORRELATION BETWEEN DEFORMATION LUMINESCENCE AND HYSTERESIS.** Geoffrey H. Woo. UCLA, Department of Physics and Astronomy, Los Angeles, CA 90095-547.
- 139 1:40 **CHANGES IN DENSITIES OF FECAL INDICATOR BACTERIA (FIB) OVER DIFFERING TIDAL FLOWS IN THE BALLONA WETLANDS, LOS ANGELES.** S. Yanamadala¹ and John H. Dorsey². ¹Chadwick High School, 26800 S. Academy Drive, Palos Verdes Peninsula, CA, 90274; ²Loyola Marymount University, Department of Natural Sciences, Los Angeles, CA, 90045.
- 140 2:00 **POLYPHENOL EFFECT ON SUSCEPTIBILITY OF OXIDIZED β -AMYLOID PEPTIDE TO INSULIN DEGRADING ENZYME.** J. Young. Alhambra High School and USC Keck School of Medicine, School of Pharmacy, Department of Pharmaceutical Science, Los Angeles, CA, 90089.
- 141 2:20 **EFFECTS OF SALINITY CONCENTRATION ON RATES OF POLYP CLONING, GROWTH, AND STROBILATION IN THE *AURELIA LABIATA* (CNIDARIA, SCYPHOZOA).** Julie A. Guerin. Cabrillo Marine Aquarium, San Pedro, CA 90731 (Palos Verdes Peninsula High School, Rolling Hills Estates, CA 90274).
- 142 2:40 **MECHANISM OF FAILED ALVEOLARIZATION FOLLOWING IN UTERO NICOTINE EXPOSURE.** Kabre, Sanyl. Hawthorne High School, Hawthorne, CA.
- 3:00 **BREAK**
- 143 3:20 **SEASONAL CHANGES AND YEAR-TO-YEAR VARIABILITY OF THE NORTHERN WATER ICE CAP FROM MARS GLOBAL SURVEYOR; MARS ORBITER CAMERA AND THERMAL EMISSION SPECTROMETER.** Katherine Lu and Angela Guo. Alhambra High School.
- 144 3:40 **CONDITIONAL KNOCKOUT OF LMO4.** Jerry Kwong, Yu Zhenquan, and Bogi Andersen. University High School and University of California Irvine, School of Medicine.
- 4:00 **Presentation by students who went to National AAJAS Meeting and student Intel Science Contestants.**